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Intellectual Property Administration
P.O. Box 272400
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Docket No.: 100202433-2
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Jonathan Maron

Application No.: 10/807,060 Confirmation No.: 4057

Filed: March 23, 2004 Art Unit: 2166

For: SYSTEM AND METHOD FOR PROVIDING A SERVICE IN A CONTROLLED RUN-TIME ENVIRONMENT

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

As required under 37 C.F.R. § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on July 11, 2007, and is in furtherance of said Notice of Appeal.

The fees required under 37 C.F.R. § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

- I. Real Party In Interest
- II. Related Appeals and Interferences
- III. Status of Claims
- IV. Status of Amendments
- V. Summary of Claimed Subject Matter

- VI. Grounds of Rejection to be Reviewed on Appeal
- VII. Argument
- VIII. Claims Appendix
- IX. Evidence Appendix
- X. Related Proceedings Appendix

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Hewlett-Packard Development Company, L.P., a Limited Partnership established under the laws of the State of Texas and having a principal place of business at 2055 S.H. 249, Houston, TX 77070, U.S.A. (hereinafter “HPDC”). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board’s decision in this appeal. Appellant has filed a Petition regarding the objection to the claims that is pending in the Final Office Action. The Examiner has objected to the phrase “code for” in claims 17 and 19-20 and has requested that the claims be amended to read “code to”. However, such an amendment would introduce a grammatical error into the claims. Furthermore, the Appellant believes that the Examiner has no basis for the objection. Therefore, the Appellant has filed a Petition asking for the withdrawal of the objection.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 20 claims pending in application.

B. Current Status of Claims

1. Claims canceled: 0.
2. Claims withdrawn from consideration but not canceled: 0.
3. Claims pending: 1-20.
4. Claims allowed: 0.
5. Claims rejected: 1-20.

C. Claims On Appeal

The claims on appeal are claims 1-20.

IV. STATUS OF AMENDMENTS

Applicant did not file an Amendment After Final Rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each of the separately argued claims involved in the Appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. It should be noted that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

Embodiments of the invention according to claim 1 provide a method (Figure 4: 400, paragraphs [0024]-[0027]) to provide a service in a controlled run-time environment, comprising: registering a proxy service (Figure 4:402, paragraph [0025]) in said controlled run-time environment wherein said proxy service implements an interface defined according to said controlled run-time environment configured to services operating in said controlled run-time

environment to interoperate with said proxy service; receiving service information by said proxy service (paragraph [0025]) from a local service executing in said controlled run-time environment via an interface method of said proxy service; communicating said service information (Figure 4: 403, paragraph [0025]) to a remote service from said proxy service; receiving processed information from said remote service in response to said communicating (Figure 4: 407, paragraph [0026]); and returning said processed information to said local service from said proxy service (Figure 4: 408, paragraph [0026]).

Embodiments of the invention according to claim 10 provide a system (Figure 3: 300, paragraphs [0019]-[0023]) to provide a modular software service, comprising: controlled run-time environment means (Figure 3: 301, paragraph [0019]) for managing processes; service registry means (Figure 3: 302, paragraph [0020]) for registering services operating in said controlled run-time environment means, wherein at least one registered service is a proxy service means; said proxy service means (Figure 3: 306, paragraph [0021]) implementing an interface defined according to said controlled run-time environment means for enabling services operating in said controlled run-time environment means to interoperate with said proxy service means, said proxy service means comprising: means for receiving service information by said proxy service means from a local service (Figure 3: 305, paragraph [0023]) executing in said controlled run-time environment means; means for communicating said service information to a remote service (Figure 3: 308, paragraph [0022]) from said proxy service means; means for receiving processed information (paragraph [0023]) from said remote service in response to said communicated service information; and means for returning said processed information (paragraph [0023]) to said local service.

Embodiments of the invention according to claim 17 provide a computer-readable medium (Figure 5: 506) that comprises executable instructions for providing a service in a controlled run-time environment, said executable instructions comprising: code for registering a proxy service (Figure 4:402, paragraph [0025]) in said controlled run-time environment wherein said proxy service implements an interface defined according to said controlled run-time environment to enable services operating in said controlled run-time environment to interoperate

with said service; code for receiving service information (paragraph [0025]) by said proxy service from a local service executing in said controlled run-time environment via a method of said proxy service; code for communicating said service information (Figure 4: 403, paragraph [0025]) to a remote service from said proxy service; code for receiving processed information (Figure 4: 407, paragraph [0026]) from said remote service in response to said communicating; and code for returning said processed information (Figure 4: 408, paragraph [0026]) to said local service from said proxy service.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. First Ground of Rejection

Claims 10 and 17-20 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

B. Second Ground of Rejection

Claims 1-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Robertson et al. (US App 2002/0174191, hereinafter Robertson).

Appellant respectfully traverses the outstanding rejections of the pending claims, and requests that the Board reverse the outstanding rejections in light of the remarks contained herein. The claims do not stand or fall together. Instead, Appellant presents separate arguments for various independent and dependent claims. Each of these arguments are presented with separate headings and sub-headings as required by 37 C.F.R. § 41.37(c)(1)(vii).

VII. ARGUMENT

A. First Ground of Rejection

Claims 10 and 17-20 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In the Final Office Action, the Examiner states that claims 10 and 17 are software per se, and therefore non-statutory subject matter. It is well settled that computer

programs are often recited as part of claims, and are patentable, see the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, OG Notices 22 November 2005, annex IV, section (a). The OG Notice directs Examiners to determine whether the computer program is being claimed as part of an otherwise statutory manufacture, machine, or process claim. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The Notice states that only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence non-statutory. See *In re Lowry*, 32 F.3d 1579, 1583-84, 32 U.S.P.Q.2d 1031, 1035 (Fed. Cir. 1994); In this case, claim 10 is directed to a system to provide modular software, and claim 17 is directed to a computer readable medium. Each of these claims is not a mere program listing, and therefore is directed to statutory subject matter. Thus, Appellant respectfully requests reversal of the rejection of record.

The Examiner then states that claims 17-20 are nonfunctional descriptive material that is stored on a computer readable medium. Appellant respectfully disagrees. Specifically, Appellant asserts that the subject matter of claims 17-20 is functional in nature, and not nonfunctional. The Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, OG Notices 22 November 2005, annex IV, section (b) provides examples of nonfunctional descriptive material such as music, literature, art, photographs and mere arrangements or compilations of facts or data. The subject matter of claims 17-20 is functional, for example claim 17 includes code for registering a proxy service in said controlled run-time environment, which performs a function, namely registering a proxy service in said controlled run-time environment. Therefore, claims 17-20 are directed to statutory subject matter. Furthermore, it is also well settled that computer programs embodied on a tangible medium is patentable subject matter under 35 U.S.C. § 101, *In re Beauregard*, 53 F.3d 1583, 35 U.S.P.Q.2d, 1383 (Fed. Cir. 1995). Claim 17 defines a computer-readable medium that comprises executable instructions for providing a service. Consequently, Applicant submits that claims 17-20 are directed to statutory subject matter under 35 U.S.C. § 101, and respectfully requests reversal of the rejection of record.

B. Second Ground of Rejection

Claims 1-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Robertson. To anticipate a claim under 35 U.S.C. § 102, a reference must teach every element of the claim, *Verdegaal Bros. v. Union Oil Co. of Cal.*, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987). Moreover, in order for a prior art reference to be anticipatory under 35 U.S.C. § 102 with respect to a claim, “[t]he elements must be arranged as required by the claim,” *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). The 35 U.S.C. § 102 rejection of record fails to establish a 35 U.S.C. § 102 rejection in accordance with the foregoing requirements.

1. Claim 1

Claim 1 defines a method to provide a service in a controlled run-time environment that includes receiving service information by said proxy service from a local service executing in said controlled run-time environment via an interface method of said proxy service. Robertson does not disclose at least these limitations. The Final Office Action equates element 910A of Robertson as the claimed proxy service, see page 4 of the Action discussing paragraphs [0190], and [0195] of Robertson. The Final Office Action then states that the claimed receiving is disclosed by paragraph [0101] of Robertson. However, this paragraph is discussing CORBA enabled processes as shown in Figure 3. Appellant notes that paragraphs [0190] and [0195] are discussing a NW service platform as shown in Figure 9. Robertson clearly states that Figure 3 is separate and distinct from Figure 9. For example, in discussing Figure 9, Robertson states “[t]his model is in sharp contrast to CORBA” (paragraph [0192]), “a CORBA context was highly constrained and awkward” (paragraph [0193], and “[t]his model...is different from CORBA” (paragraph [0194]). Consequently, the limitation of receiving service information by said proxy service is not disclosed as being the same embodiment as with the other elements relied upon in Robertson. Thus, Robertson does not teach all of the claimed limitations arranged in the same manner as defined in claim 1. Therefore, the Appellant respectfully asserts that for the above reasons claim 1 is patentable over the 35 U.S.C. § 102 rejection of record, and respectfully requests reversal of the rejection of record.

2. Claim 10

Claim 10 defines a system to provide a modular software service that includes means for receiving service information by said proxy service means from a local service executing in said controlled run-time environment means. Robertson does not disclose at least these limitations. The Final Office Action equates element 910A of Robertson as the claimed proxy service, see page 4 of the Action discussing paragraphs [0190], and [0195] of Robertson. The Final Office Action then states that the claimed receiving is disclosed by paragraph [0101] of Robertson. However, this paragraph is discussing CORBA enabled processes as shown in Figure 3. Appellant notes that paragraphs [0190] and [0195] are discussing a NW service platform as shown in Figure 9. Robertson clearly states that Figure 3 is separate and distinct from Figure 9. For example, in discussing Figure 9, Robertson states “[t]his model is in sharp contrast to CORBA” (paragraph [0192]), “CORBA context was highly constrained and awkward” (paragraph [0193], and “[t]his model...is different from CORBA” (paragraph [0194]). Consequently, the limitation of means for receiving service information by said proxy service means is not disclosed as being the same embodiment as with the other elements relied upon in Robertson. Thus, Robertson does not teach all of the claimed limitations arranged in the same manner as defined in claim 10. Therefore, the Appellant respectfully asserts that for the above reasons claim 10 is patentable over the 35 U.S.C. § 102 rejection of record, and respectfully requests reversal of the rejection of record.

3. Claim 17

Claim 17 defines a computer-readable medium that comprises executable instructions to provide a service in a controlled run-time environment that includes code for receiving service information by said proxy service from a local service executing in said controlled run-time environment via a method of said proxy service. Robertson does not disclose at least these limitations. The Final Office Action equates element 910A of Robertson as the claimed proxy service, see page 4 of the Action discussing paragraphs [0190], and [0195] of Robertson. The Final Office Action then states that the claimed receiving is disclosed by paragraph [0101] of Robertson. However, this paragraph is discussing CORBA enabled processes as shown in

Figure 3. Appellant notes that paragraphs [0190] and [0195] are discussing a NW service platform as shown in Figure 9. Robertson clearly states that Figure 3 is separate and distinct from Figure 9. For example, in discussing Figure 9, Robertson states “[t]his model is in sharp contrast to CORBA” (paragraph [0192]), “a CORBA context was highly constrained and awkward” (paragraph [0193], and “[t]his model...is different from CORBA” (paragraph [0194]). Consequently, the limitation of code for receiving service information by said proxy service is not disclosed as being the same embodiment as with the other elements relied upon in Robertson. Thus, Robertson does not teach all of the claimed limitations arranged in the same manner as defined in claim 17. Therefore, the Appellant respectfully asserts that for the above reasons claim 17 is patentable over the 35 U.S.C. § 102 rejection of record, and respectfully requests reversal of the rejection of record.

4. Dependent Claims 2-9, 11-16, and 18-20

Claims 2-9, 11-16, and 18-20 depend from base claims 1, 10, and 17, respectively, and thus inherit all limitations of their respective base claim. Each of claims 2-9, 11-16, and 18-20 sets forth features and limitations not recited by Robertson. Thus, the Appellant respectfully asserts that for the above reasons claims 2-9, 11-16, and 18-20 are patentable over the 35 U.S.C. § 102 rejection of record, and respectfully requests reversal of the rejection of record.

VIII. CLAIMS APPENDIX

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

IX. EVIDENCE APPENDIX

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

X. RELATED PROCEEDINGS APPENDIX

No related proceedings are referenced in II. above, hence copies of decisions in related proceedings are not provided. The Petition has not been decided.

Dated: September 11, 2007

Respectfully submitted,

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: September 11, 2007

Signature: Jay H. Perigo
Jay H. Perigo

By Thomas W. Kelton
Thomas Kelton
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APPENDIX A

The claims involved in the present appeal are listed below.

1. A method to provide a service in a controlled run-time environment, comprising:
registering a proxy service in said controlled run-time environment wherein said proxy service implements an interface defined according to said controlled run-time environment configured to services operating in said controlled run-time environment to interoperate with said proxy service;
receiving service information by said proxy service from a local service executing in said controlled run-time environment via an interface method of said proxy service;
communicating said service information to a remote service from said proxy service;
receiving processed information from said remote service in response to said communicating; and
returning said processed information to said local service from said proxy service.
2. The method of claim 1 further comprising:
instantiating, by said controlled run-time environment, an object of a class that defines said proxy service.
3. The method of claim 2 further comprising:
instantiating, by said controlled run-time environment, said object in a partition; and
enabling, by said controlled run-time environment, only services operating in said partition to access said proxy service.
4. The method of claim 1 wherein said communicating service information comprises:
encapsulating said service information in an extensible mark-up language (XML) file.

5. The method of claim 1 further comprising:
exposing, by said controlled run-time environment, said proxy service only when access
is permitted according to security parameters.
6. The method of claim 5 wherein said exposing comprises:
determining user-level authorization from said security parameters.
7. The method of claim 5 wherein said exposing comprises:
determining process-level authorization from said security parameters.
8. The method of claim 1 further comprising:
creating a log of access to said remote service.
9. The method of claim 1 wherein said communicating said service information
comprises:
performing a remote procedure call.

10. A system to provide a modular software service, comprising:
controlled run-time environment means for managing processes;
service registry means for registering services operating in said controlled run-time
environment means, wherein at least one registered service is a proxy service means;
said proxy service means implementing an interface defined according to said controlled
run-time environment means for enabling services operating in said controlled run-time
environment means to interoperate with said proxy service means, said proxy service means
comprising:

means for receiving service information by said proxy service means from a local service
executing in said controlled run-time environment means;

means for communicating said service information to a remote service from said proxy
service means;

means for receiving processed information from said remote service in response to said
communicated service information; and

means for returning said processed information to said local service.

11. The system of claim 10 wherein said proxy service means further comprises:
means for verifying said service information that is operable before said means for
communicating.

12. The system of claim 10 wherein said proxy service means further comprises:
means for communicating with a distributed service registry to identify said remote
service.

13. The system of claim 10 wherein said controlled run-time environment means
instantiates said object in a partition and only permits services operating in said partition to
access said proxy service.

14. The system of claim 10 where said controlled run-time environment means comprises:

security management means for exposing said proxy service only when said security management means determines access is permitted according to security parameters.

15. The system of claim 10 wherein said controlled run-time environment means comprises:

logging means for creating a log of access to said remote service.

16. The system of claim 10 wherein said means for communicating performs a remote procedure call.

17. A computer-readable medium that comprises executable instructions for providing a service in a controlled run-time environment, said executable instructions comprising:

code for registering a proxy service in said controlled run-time environment wherein said proxy service implements an interface defined according to said controlled run-time environment to enable services operating in said controlled run-time environment to interoperate with said service;

code for receiving service information by said proxy service from a local service executing in said controlled run-time environment via a method of said proxy service;

code for communicating said service information to a remote service from said proxy service;

code for receiving processed information from said remote service in response to said communicating; and

code for returning said processed information to said local service from said proxy service.

18. The computer-readable medium of claim 17 wherein said proxy service is an object of a class that is instantiated by said controlled run-time environment.

19. The computer-readable medium of claim 17 wherein said executable instructions further comprise:

code for verifying said service information before said code for communicating is operable.

20. The computer-readable medium of claim 17 wherein said executable instructions further comprise:

code for communicating with a distributed service registry to identify said remote service.

APPENDIX B

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

APPENDIX C

No related proceedings are referenced in II. above, hence copies of decisions in related proceedings are not provided.